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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/781,018 | 02/18/2004 | Radu S. Jasinski | PU020207 Div. 1 | 2839 |

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EXAMINER

BOCCIO, VINCENT F

ART UNIT PAPER NUMBER

2616

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|----------------------------------|--|
| Office Action Summary | Application No. 10/781,018 | Applicant(s) JASINSCHI ET AL. | |
| | Examiner Vincent F. Boccio | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2616.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed subject matter based on claims 15-16, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 13-16 are rejected under 35 U.S.C. 101 because

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the claimed invention is directed to non-statutory subject matter.

Since, claimed the signal is not embodied on a medium, therefore, the claims are not directed toward statutory subject matter.

Secondly, there does exist meta data or functional descriptive material, such as time of a segment, but, there is not recited, use for the data or intended use or stated purpose, but, merely first and second data segments, therefore, for this reason also, it is deemed that the claims are directed toward non-statutory subject matter.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyatake et al. (US 5,267,034).

Regarding claim 8, Miyatake discloses and meets the limitations associated with a computer implemented method (CPU 15 and software/programs in memory 16, col. 4), of generating metadata (Fig. 1, met by "Camera Work description table 19" or meta data which is data about the data) the method comprising the steps of:

- estimating a value (table 19, since calculating an average, in the process of generating camera work parameters, meets the limitation of an estimation) corresponding to a camera motion for an image wherein the value is related to the translational motion of a camera;

for at least one of:

- 1} track left {see PAN};
- 2} track right {see PAN};

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- 3} boom down;
- 4} boom up;
- 5} dolly forward;
- 6} dolly back; and

- generating the metadata by determining a fraction (Fig. 2, "Detect Motion Vector for Each block", which one block is a fraction) corresponding to the image, wherein the fraction is either:

A} a fraction of the image that is uncovered due to camera motion (due to motion); or

B} a fraction of the image that is covered due to camera motion (met by detecting motion vectors between two images to determine camera work parameters, wherein panning in the +/- X directions, or tracking).

Claims 12 is analyzed and discussed with respect to the claim above, wherein the purpose of the generation of the camera work parameters or meta data, is for such issues of doing query operations or retrieving or indexing (col. 1, and Fig. 1; table 19 and 16, also 21 of 17).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned

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at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 9-11 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyatake et al. (US 5,267,034).

Regarding claims 9-10, Miyatake discloses and meets the limitations of wherein the metadata is generated by an operation of determining an average in used in the calculation process which is a displacement of blocks by comparing the image to a second, but,

fails to disclose the additional recited limitation of utilizing a feature point means and comparing points with respect to a feature points, as claimed in claim 9; and

fails to disclose determining in respect to an area expressed in normalized coordinates, claim 10.

The examiner takes official notice in the process of generating motion vectors in association with a feature point engine, between successive images is well known in the art and working using normalized values is deemed to be a known and obvious mathematical principle, therefore, it would have been obvious to one skilled in the art at the time of the invention to modify Miyatake by incorporating a feature point engine or means which when less points can be used by a feature point engine, provides advantages of computational requirements can be lessened, by using feature point motion vectors in that not all blocks needs to be compared to determine camera motion, also using normalized values also lessen computational requirements, as is deemed obvious to those skilled in the art.

Regarding claim 11, Miyatake discloses some sort of display for the camera motion, but, fails to disclose the utilization of a unified modeling language format for the metadata.

The examiner takes official notice that UMLs are well known, which allow for data to be presented in distinctive representations for various purposes, therefore, it would have been obvious to one skilled in the art at the time of the invention to utilize a UML language or format, to present the Meta data being advantageous to a user, such as for identifying areas with respect to the generated meta data assisting the user in editing.

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Claims 13-14 are analyzed and discussed with respect to the claims above, wherein the claims seem directed to a display operation showing first and second and third segments, wherein Miyatake disclose a table form, based on the combination as applied with respect to the UML, the examiner further renders obvious that the camera work can be presented as claimed and disclosed by applicant's specification having line segments, which is merely a form for display or GUI interface to present the data in line segments for the camera work corresponding to three parameters disclosed by Miyatake, Zoom, Pan X and Pan T, obviously can be presented in line segment Gui representation as is deemed obvious to those skilled in the art.

Claims 15 and 16, are analyzed with respect to claim 11, wherein Miyatake fails to disclose fourth and fifth segments (deemed to be displayed, related to claim 11), which are vertical and horizontal positions of a focus operation, which correspond to the point in a image wherein the camera motion types diverge or converge.

The examiner takes official notice that FOC and FOE are well known in the art, being Focus of Expansion and Contraction parameters, deemed obvious to generate these parameters being tracking type data to focus attention in images at point of divergence and convergence as areas of interest, therefore, it would have been obvious to generate line segments in view of tracking using FOE/FOC, types associated with camera motion to identify tracking areas of interest to the user, as is deemed obvious to those skilled in the art.

Contact Fax Information

Any response to this action should be faxed to:

(703) 872-9306, (for communication intended for entry)

Contact Information

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record, Monday-Tuesday & Thursday-Friday, 8:00 AM to 5:00 PM Vincent F. Boccio (571) 272-7373.

Primary Examiner, Boccio, Vincent
5/16/05


VINCENT BOCCIO
PRIMARY EXAMINER